What is claimed is:

1. A method of checking data in a two dimensional pattern, comprising:

identification of a region within the pattern that surrounds at least one feature in the pattern;

subtraction of the feature from within the region, leaving a two dimensional ring-like region; and

analyzing optical behavior within the ring-like region to predict optical interactions.

2. The method of claim 1, wherein identification of a region within the pattern includes sizing up the feature by a given distance.

3. The method of claim 2, wherein sizing up the feature by a given distance includes sizing up the feature by an optical ambit distance.

4. The method of claim 1, wherein analyzing of optical behavior within the ring-like region includes three dimensional optical analysis affecting patterns within the two dimensional ring-like region.

5. The method of claim 1, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

6. The method of claim 5, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

7. The method of claim 6, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.

8. A method of forming a reticle, comprising:

organizing data into a two dimensional pattern of features;

checking the data, including:

identification of a region within the pattern that surrounds at least one feature in the pattern;

subtraction of the feature from within the region, leaving a two dimensional ring-like region;

analyzing optical behavior within the ring-like region to identify interaction regions;

organizing data into at least one modifying feature located within at least one interaction region; and

printing the two dimensional pattern of features and the at least one modifying feature onto a reticle substrate.

9. The method of claim 8, wherein organizing data into at least one modifying feature includes organizing data into at least one sub printing lithographic aperture.

10. The method of claim 8, wherein identification of a region within the pattern includes sizing up the feature by a given distance.

11. The method of claim 10, wherein sizing up the feature by a given distance includes sizing up the feature by an optical ambit distance.

12. The method of claim 10, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

13. The method of claim 12, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

14. The method of claim 13, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.

15. A method of forming a pattern of features on a semiconductor substrate:

organizing data into a two dimensional pattern of features;

checking the data, including:

identification of a region within the pattern that surrounds at least one feature in the pattern;

subtraction of the feature from within the region, leaving a two dimensional ring-like region;

analyzing optical behavior within the ring-like region to identify interaction regions;

organizing data into at least one modifying feature located within at least one interaction region;

printing the two dimensional pattern of features and the at least one modifying feature onto a reticle substrate; and

forming the two dimensional pattern of features on the semiconductor substrate wherein the modifying feature substantially prevents printing of unwanted features.

16. The method of claim 15, wherein organizing data into at least one modifying feature includes organizing data into at least one sub printing lithographic aperture.

17. The method of claim 15, wherein identification of a region within the pattern includes sizing up the feature by a given distance.

18. The method of claim 17, wherein sizing up the feature by a given distance includes sizing up the feature by an optical ambit distance.

19. The method of claim 15, wherein forming the two dimensional pattern of features on the semiconductor substrate includes photolithography with a UV wavelength energy source.

20. The method of claim 15, wherein forming the two dimensional pattern of features on the semiconductor substrate includes photolithography with an X-ray wavelength energy source.

21. A machine-readable medium with instructions stored thereon, the instructions when executed operable to cause:

identification of a region within the pattern that surrounds at least one feature in the pattern;

subtraction of the feature from within the region, leaving a two dimensional ring-like region; and

analyzing of optical behavior within the ring-like region to predict optical interactions.

22. The machine-readable medium of claim 21, wherein identification of a region within the pattern includes sizing up the feature by a given distance.

23. The machine-readable medium of claim 22, wherein sizing up the feature by a given distance includes sizing up the feature by an optical ambit distance.

24. The machine-readable medium of claim 21, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

25. The machine-readable medium of claim 24, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

26. The machine-readable medium of claim 25, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.

27. A pattern generating system, comprising:

a processor;

a memory, containing instructions thereon, the instructions when executed operable to cause:

identification of a region within the pattern that surrounds at least one feature in the pattern;

subtraction of the feature from within the region, leaving a two dimensional ring-like region; and

analyzing of optical behavior within the ring-like region to predict optical interactions.

28. The pattern generating system of claim 27, wherein identification of a region within the pattern includes sizing up the feature by a given distance.

29. The pattern generating system of claim 28, wherein sizing up the feature by a given distance includes sizing up the feature by an optical ambit distance.

30. The pattern generating system of claim 27, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

31. The pattern generating system of claim 30, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

32. The pattern generating system of claim 31, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.

33. A method of solving a system of equations, comprising:

representing each of a number of equations in the system as a graphical area wherein a numerical coordinate solution to each of the equations falls within the respective graphical area;

identification of at least one intersecting region where the graphical areas overlap; and

selecting a point within at least one of the intersecting regions that represents a solution to the system of equations.

34. The method of claim 33, wherein representing each of the number of equations in the system as a graphical area includes representing a number circles in the system as a number of rings having a ring width, wherein solutions to the circle fall within the graphical ring.

35. The method of claim 34, wherein the ring width is selected based on a desired accuracy of the solution to the number of equations.

36. The method of claim 33, wherein selecting a point within at least one of the intersecting regions that represents a solution to the system of equations includes selecting a centroid of at least one of the intersecting regions.

37. The method of claim 34, wherein identification of at least one intersecting region includes checking a width of all graphical areas and identifying regions with a width greater than the ring width.

38. A method of forming a reticle, comprising:

organizing data into a two dimensional pattern of features;

checking the data, including:

identification of a number of first regions within the pattern, the first regions being spaced apart from each of a number of features in the pattern;

identification of a number of second regions where the first regions overlap;

organizing data into at least one modifying feature located in two dimensions over a portion of at least one of the number of second regions; and

printing the two dimensional pattern of features and the at least one modifying feature onto a reticle substrate.

39. The method of claim 38, wherein organizing data into at least one modifying feature located in two dimensions over the portion of at least one of the number of second regions includes organizing data into at least one modifying feature located in two dimensions over a centroid of at least one of the number of second regions.

40. The method of claim 38, wherein identification of a number of first regions within the pattern, the first regions being spaced apart from each of a number of features in the pattern includes identification of a number of graphical rings within the pattern, the graphical rings being spaced apart from a centroid of each of a number of features in the pattern by a radius.

41. The method of claim 40, wherein identification of a number of second regions where the first regions overlap includes checking a width of all graphical areas and identifying regions with a width greater than a ring width of the graphical rings.

42. The method of claim 40, wherein the radius is an optical ambit distance.

43. A method of checking data in a two dimensional pattern, comprising:

identification of a number of first regions within the pattern that surround the number of features in the pattern;

identification of a number of second regions where the first regions overlap; and

analyzing optical behavior within the number of second regions to predict optical interactions.

44. The method of claim 43, wherein identification of a region within the pattern includes sizing up the number of features by a given distance.

45. The method of claim 44, wherein sizing up the number of features by a given distance includes sizing up the number of features by an optical ambit distance.

46. The method of claim 43, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

47. The method of claim 46, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

48. The method of claim 47, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.

49. A method of forming a reticle, comprising:

organizing data into a two dimensional pattern of features;

checking the data, including:

identification of a number of first regions within the pattern that surround the number of features in the pattern;

identification of a number of second regions where the first regions overlap;

analyzing optical behavior within number of second regions to identify interaction regions;

organizing data into at least one modifying feature located within at least one interaction region; and

printing the two dimensional pattern of features and the at least one modifying feature onto a reticle substrate.

50. The method of claim 49, wherein organizing data into at least one modifying feature includes organizing data into at least one sub printing lithographic aperture.

51. The method of claim 49, wherein identification of a region within the pattern includes sizing up the number of features by a given distance.

52. The method of claim 51, wherein sizing up the number of features by a given distance includes sizing up the number of features by an optical ambit distance.

53. The method of claim 49, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

54. The method of claim 53, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

55. The method of claim 54, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.

56. A machine-readable medium with instructions stored thereon, the instructions when executed operable to cause:

identification of a number of first regions within the pattern that surround the number of features in the pattern;

identification of a number of second regions where the first regions overlap; and

analyzing of optical behavior within the second regions to predict optical interactions.

57. The machine-readable medium of claim 56, wherein identification of a number of first regions within the pattern includes sizing up the number of features by a given distance.

58. The machine-readable medium of claim 57, wherein sizing up the number of features by a given distance includes sizing up the number of features by an optical ambit distance.

59. The machine-readable medium of claim 56, wherein analyzing of optical behavior includes predicting optical interference that forms at least one additional feature in a given lithographic process.

60. The machine-readable medium of claim 59, wherein analyzing of optical behavior includes predicting a location of an additional feature in the given lithographic process.

61. The machine-readable medium of claim 60, wherein analyzing of optical behavior includes predicting a size and shape of the additional feature in the given lithographic process.